06-0052



U.S. Department of Transportation

Federal Highway Administration Washington Division

Suite 501 Evergreen Plaza 711 South Capitol Way Olympia, Washington 98501-1284 (360) 753-9480 (360) 753-9889 (FAX) http://www.fhwa.dot.gov/wadiv

September 25, 2006

HDE-WA/435.6

Mr. Douglas B. MacDonald Secretary of Transportation Department of Transportation Olympia, Washington

Attention: Kurt Sielbach

Southwest Region Supplemental Blanket ITS Proprietary Items

Dear Mr. MacDonald:

We have reviewed the documentation submitted with your August 24, 2006, letter requesting FHWA approval of a proprietary item.

The request is for the use of Soletec Microwave and associated equipment to be used within the Southwest Region for ITS communications and wireless technology through the 2005-2007 Biennium.

We approve the use of this proprietary product.

Sincerely,

DANIEL M. MATHIS, P.E. Division Administrator

Donald A. Petersen

By: Donald A. Petersen

Division Safety/Design Engineer

Enclosure

cc: Jim Eastman, 47330 Greg Lippincott, 47330 Lori Beebe, 47330





66-0052



Memorandum

DAH	E: May	30, 2006	
TO:		astman Assistant State Design Engineer 7330	Approval: FHWA By:
THRU	U: Ri	ck Keniston/ Dave Bellinger	Date:
FRON	M: CI	nad Hancock/Tu Ho	Concurrence: Assistant State Design Engineer
SUBJ	ECT:	Statewide Blanket (06-0030), 2005-2007 Biennium – Supplement 1	By:
		• •	Date

Description

The SW Region is requesting blanket proprietary approval for the following ITS materials for the 2005-2007 biennium. The materials submitted are essential for synchronization with existing highway facilities. At this time, the SW Region is in the process of, with assistance from the HQ Office of Wireless Technology, designing and implementing wireless systems to provide communication to distant ITS devices, where no other forms of reliable and cost effective communication are available. Given that other regions had implemented wireless system with identical hardware, it's possible to maintain consistency throughout the state. In the future, as technology develops perhaps interfaces that are more open will be developed which will eliminate the need for proprietary items.

Each material is identified below, along with justification for each item.

Solectek Microwave and associated equipment

ITS Communications & Wireless Technology has designed broadband wireless microwave systems based on WiLan. The ease of software control and the products versatility made it the radio of choice. WiLan announced in February 2006 that they were moving away from production of broadband technology preferring to license the technology instead. Their antenna manufacturing was sold off to India's Kavveri Telecom and their present Web site is non existent. That translates into an inability to work with the company. WiLan products may not be available in the very near future, because the company is "going out of business".

ITS Communications & Wireless Technology has selected Solectek, 6370 Nancy Ridge Dr, STE109m San Diego, Ca. to replace the WiLan. They offer products not only in the 5.8 Ghz ISM band, but also offer products in the licensed 4.9 Ghz Public Safety Band. The Washington State

Department of Transportation (WSDOT) has a statewide license to operate in the 4.9 Ghz band and Solectek product specification is perfect for applications in the broadband wireless technology arena. Actually, there specifications are better than the WiLan products in Power, Range, and Ethernet throughput. The additional benefits of selecting Solectek are the engineering support we have seen thus far and their ability to provide both 4.9 Ghz and 5.8 Ghz products. The Solectek family of products is manufactured in California and all the product support comes from California. Solectek products offer Data rates between 6 Mbs and 108 Mbs depending upon engineering design. Their products also allow "daisy chain" of systems typical of highway video camera systems and a mix of licensed and unlicensed systems.

Since Solectek offers products in the 4.9 Ghz public safety band, and with their products' ability to integrate licensed and unlicensed systems to maintain system reliability and flexibility, it is the public's best interest to specify Solectek equipment.

The technologies used in the above items are constantly improving. As such, we are continually evaluating the needs of our system and the equipment that best serves those needs.

If you have any questions or need additional information, please contact Tu Ho at 360-905-2270.

CH/th

Cc: file